

Claims

- Sub
B1
1. A data processing apparatus for correlating network events among a number of client services comprising:
- at least one computer comprising:
- 5 a memory having program instructions; and
- a processor configured to use said program instructions to provide:
- a network management service;
- an event notification service;
- a network mediation service adapted to:
- 10 receive a raw event from an external computer network; and
- transmit said raw event to said event notification service;
- a message parsing service adapted to:
- receive a raw event from said event notification service;
- 15 parse said raw event; and
- transmit said parsed event to said event notification service; and
- an event correlation service coupled to a knowledge database comprising correlation knowledge, said event correlation service adapted to:
- receive said parsed event from said event notification service;
- utilize data stored in said knowledge database to derive an event
- from said parsed event; and

[illegible]

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5         transmit said raw event to said message parsing service.

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5. The data processing apparatus of claim 4, wherein said message parsing service is

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10. The data processing apparatus of claim 9, wherein said event notification service is further comprised of at least one filter.

11. The data processing apparatus of claim 10, wherein said at least one filter is coupled to at least one of said plurality of event channels.

12. The data processing apparatus of claim 9, wherein said raw event channel is adapted to:

receive a raw event from said network mediation service; and

transmit said raw event to said message parsing service.

13. The data processing apparatus of claim 9, wherein said parsed event channel is adapted to:

receive a raw event from said message parsing service; and

transmit said raw event to said network management service.

14. The data processing apparatus of claim 9, wherein said parsed event channel is

[illegible]

receive a parsed event from said message parsing service; and

transmit said parsed event to said event correlation service.

receive a derived event from said event correlation service; and

transmit said derived event to network management service.

[illegible]

17. The method of claim 16, wherein said step of transmitting said derived event to one of a plurality of operator workstations, further comprising the following steps:

transmitting said derived event from said event correlation service to a network management service; and

5 transmitting said derived event from said network management service to one of a plurality of operator workstations.

Sub B3 18. A method for correlating network event messages on a computer network comprising a network mediation service, a message parsing service, an event notification service, an event correlation service, and a knowledge database coupled together via a plurality of interfaces, said method comprising the steps of:

5 receiving a raw event at said network mediation service from an external computer network;

transmitting said raw event to said message parsing service;

parsing said raw event by said message parsing service;

transmitting said parsed event to said event correlation service;

10 utilizing data stored in said knowledge database to derive an event from said parsed event; and

transmitting said derived event to one of a plurality of operator workstations.

19. The method of claim 18, wherein said step of transmitting said raw event to said message parsing service, further comprises the steps of:

transmitting said raw event from said network mediation service to said event notification service; and

5 transmitting said raw event from said event notification service to said message parsing service.

20. The method of claim 19, wherein the step of transmitting said raw event from said event notification service to said message parsing service, further comprises the following steps:

receiving said raw event at a raw event channel;

processing said raw event by said raw event channel; and

5 transmitting said raw event from said raw event channel to said message parsing service.

21. The method of claim 20, wherein said step of transmitting said raw event from said raw event channel to said message parsing service, further comprises the following steps of:

transmitting said raw event from said raw event channel to at least one event filter; and

5 transmitting said raw event from said at least one event filter to said message
parsing service.

22. The method of claim 18, wherein said step of transmitting said parsed event to
said event correlation service, further comprises the steps of:

 transmitting said parsed event from said message parsing service to said event
notification service; and

5 transmitting said parsed event from said event notification service to said event
correlation service.

23. The method of claim 22, wherein the step of transmitting said parsed event from
said event notification service to said event correlation service, further comprises the following
steps:

 receiving said parsed event at a parsed event channel;

5 processing said parsed event by said parsed event channel; and

 transmitting said processed event from said parsed event channel to said event
correlation service.

transmitting said processed event from said parsed event channel to at least one

transmitting said processed event from said at least one event filter to said event service.

transmitting said derived event from said event correlation service to said event service; and

transmitting said derived event from said network management service to one of a
operator workstations.

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comprises the following steps:

- 5 receiving said derived event at a derived event channel;
- processing said derived event by said derived event channel; and
- transmitting said processed event from said derived event channel to said network management service.

27. The method of claim 26, wherein the step of transmitting said processed event from said derived event channel to said network management service, further comprises the following steps:

- 5 transmitting said processed event from said derived event channel to at least one event filter; and
- transmitting said processed event from said at least one event filter to said network management service.

28. A method for correlating network event messages on a computer network comprising a network mediation service, a message parsing service, an event notification service, and a network management service coupled together via a plurality of interfaces, said method comprising the steps of:

- 5 receiving a raw event at said network mediation service from an external

computer network;

transmitting said raw event to said message parsing service;

parsing said raw event by said message parsing service;

transmitting said parsed event to said network management service.

29. The method of claim 28, wherein said step of transmitting said parsed event to said network management service, further comprises the steps of:

transmitting said parsed event from said message parsing service to said event notification service; and

transmitting said parsed event from said event notification service to said network management service.

30. The method of claim 29, wherein the step of transmitting said parsed event from said event notification service to said network management service, further comprises the following steps:

receiving said parsed event at a parsed event channel;

processing said parsed event by said parsed event channel; and

transmitting said processed event from said parsed event channel to said network management service.

31. The method of claim 30, wherein said step of transmitting said processed event from said parsed event channel to said network management service, further comprises the following steps of:

transmitting said processed event from said parsed event channel to at least one
5 event filter; and
transmitting said processed event from said at least one event filter to said
network management service.

Sub B5 32. A data processing apparatus for correlating network events among a number of
client services comprising:
means for receiving a raw event at said message parsing service;
means for parsing said raw event by said message parsing service;
5 means for transmitting said parsed event to said event correlation service;
means for utilizing data stored in said knowledge database to derive an event from
said parsed event; and
means for transmitting said derived event to one of a plurality of operator
workstations.

a processor configured to use the program instructions to receive a raw event at said

[illegible]